

CLAIM AMENDMENTS

1-9. (Canceled)

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10. (Currently Amended) A unitized T1E1.4 compliant filter and splitter circuit used in telecommunication systems for asymmetric interconnection interconnecting between incoming telephone lines and a subscriber's telephone termination equipment located at a subscriber's premises for blocking DSL signals so as to prevent mitigate interference problems between DSL devices and the subscriber's termination equipment, and communicate the DSL signals to a device capable of utilizing them, said compliant filter and splitter circuit comprising:

a low-pass filter section formed of first and second inductors and a first capacitor;

said first inductor having a first end connected to a first input terminal and a second end;

said second inductor having a first end connected to a second input terminal and a second end;

said first capacitor having a first end connected to said second end of said first inductor and having a second end connected to said second end of said second inductor;

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an elliptical filter section formed of third and fourth inductors and second and third capacitors;

said third inductor and said second capacitor being connected in parallel and having their one end joined also to said second end of said first inductor and their other end joined to a first output terminal; and

said fourth inductor and said third capacitor being connected in parallel and having their one end joined also to said second end of said second

inductor and their other end joined to a second output terminal [[.]];

first and second DSL terminals electrically coupled to respective ones of said first and second input terminals;

said first through fourth inductors and said first through third capacitors being housed in a modular adapter unit, said modular adapter unit including first, second and third modular jacks;

said first modular jack being adapted for connection to the incoming telephone lines via said first and second input terminals;

said second modular jack being adapted for connection to the subscriber's termination equipment via said first and second output terminals; and

said third modular jack being adapted for connection to the DSL devices via said first and second DSL terminals.

11. (Original) A T1E1.4 compliant filter circuit as claimed in Claim 10, wherein said first and second inductors have values on the order of 4.7 mH.

12. (Original) A T1E1.4 compliant filter circuit as claimed in Claim 11, wherein said third and fourth inductors have values on the order of 4.3 mH.

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13. (Original) A T1E1.4 compliant filter circuit as claimed in Claim 12, wherein said first capacitor has a value on the order of 10 nF.

14. (Original) A T1E1.4 compliant filter circuit as claimed in Claim 13, wherein said second and third capacitors have values on the order of 10 nF.

15. (Canceled)

16. A T1E1.4 compliant filter circuit as claimed in Claim [[15]] 1, wherein said modular design adapter unit is capable of self-installation by a subscriber.

17-20. (Canceled)

21. (New) A filter circuit used in telecommunication systems for interconnecting between at least two incoming telephone lines and respective ones of a subscriber's termination equipment, said filter adapted to substantially block DSL signals to the subscriber's termination equipment, said filter circuit comprising at least two similar filter sub-circuits each comprising at least:

first and second inductors connected in series between a first input terminal and a first output terminal;

said first inductor having its one end connected to said first input terminal and its other end connected to one end of said second inductor at a first common point, said second inductor having its other end connected to said first output terminal;

third and fourth inductors connected in series between a second input terminal and a second output terminal;

said third inductor having its one end connected to said second input terminal and its other end connected to one end of said fourth inductor at a second common point, said fourth inductor having its other end connected to said second output terminal;

a first capacitor having its one end connected to said

first common point and its other end connected to said second common point;

a second capacitor having its one end connected to said first common point and its other end connected to said first output terminal; and

a third capacitor having its one end connected to said second common point and its other end connected to said second output terminal.

22. (New) The filter circuit as claimed in claim 21, further comprising a plurality of DSL terminals electrically coupled to respective ones of each of said input terminals associated with said at least two sub-circuits.

23. (New) The filter circuit as claimed in claim 21, wherein said filter circuit is disposed substantially within a housing, said housing further comprising at least first, second and third modular jacks, said first jack being adapted to interface with said at least two incoming telephone lines, said second jack being adapted to interface with said DSL terminals, and said third jack being adapted to interface with said terminal equipment.

24. (New) The filter circuit as claimed in claim 21, further comprising at least one ferrite sleeve adapted to shield at least a portion of said inductors first, second,

third and fourth inductors in at least one of said sub-circuits.

25. (New) The filter circuit as claimed in claim 24, wherein said at least one ferrite sleeve comprises a plurality of ferrite sleeves each adapted to shield said second and fourth inductors in respective ones of each of said at least two sub-circuits.

26. (New) The filter circuit as claimed in claim 21, further comprising a common substrate having at least first and second ends, said at least two sub-circuits being mounted on said substrate, said first and third inductors of each of said sub-circuits being disposed proximate said first and second ends, respectively, so as to reduce cross-talk therebetween.

27. (New) The filter circuit as claimed in claim 23, further comprising a plurality of ferrite sleeves each adapted to shield said third and fourth inductors in respective ones of each of said at least two sub-circuits.

28. (New) The filter circuit as claimed in claim 27, further comprising a common substrate having at least first and second ends, said at least two sub-circuits being mounted on said substrate, said first and third inductors of each of said sub-circuits being disposed proximate said first and

second ends, respectively, so as to reduce cross-talk therebetween.

29. (New) A T1E1.4 compliant subscriber-installable, unitized telecommunications splitter and filter apparatus adapted for asymmetrically interconnecting between at least one incoming telephone line and subscriber termination and DSL equipment, said apparatus adapted to substantially block DSL signals to the subscriber's termination equipment and provide said signals to said DSL equipment, comprising:

a filter and splitter circuit comprising:

at least first and second inductors disposed in electrical series between a first input terminal and a first output terminal, said first and second inductors being electrically connected via a first common node;

at least third and fourth inductors disposed in electrical series between a second input terminal and a second output terminal, said third and fourth inductors being electrically connected via a second common node;

a first capacitor disposed electrically between said first and second common nodes;

a second capacitor disposed in electrical parallel with said second inductor;

a third capacitor disposed in electrical parallel with said fourth inductor; and

first and second DSL terminals electrically coupled to said first and second input terminals, respectively; and

a housing having said filter and splitter circuit and at least first, second and third connectors disposed substantially therein, said first connector electrically coupled to said first and second input terminals, said second connector electrically coupled to said first and second DSL terminals, and said third connector electrically coupled to said first and second output terminals.

30. (New) The apparatus as claimed in claim 29, further comprising at least one ferrite sleeve adapted to shield at least said second and fourth inductors.